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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,884	02/20/2002	Kailash C. Vasudeva	PAT 51411-2 US	6451

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BORDEN LADNER GERVAIS LLP  
WORLD EXCHANGE PLAZA  
100 QUEEN STREET SUITE 1100  
OTTAWA, ON K1P 1J9  
CANADA

EXAMINER
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HOWELL, DANIEL W

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 09/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/077,884

Applicant(s)

VASUDEVA, KAILASH C.

Examiner

Daniel W. Howell

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7 and 9 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,8 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Mackey '673. Figures 3, 5, and 7 show a bit having cutting edges 33 which have been bent in the direction of rotation. As seen from figure 5, the bend contacts the side of the blade at a first position which is closer to the rear of the bit than to the cutting edges.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackey '673 in view of Williams, III et al. Mackey '673 does not show edge spurs or a relief. Williams, III et al shows a spade bit having spurs 56, which will help to prevent the bit from wobbling. It is considered to have been obvious to have provided Mackey '673 with spurs as taught by Williams, III et al in order to prevent the bit from wandering and wobbling. The tip of Williams, III et al is equipped with a relief 36, which will provide the tip with a sharper positive cutting edge, which will also help center the bit better. It is considered to have been obvious to have provided Mackey '673 with a relief as taught by Williams, III et al in order to improve the cutting action on the tip of the bit and help center the bit better.

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5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mackey '673 in view of Sundstrom et al. Mackey '673 does not show a relief on the tip. The tip of Sundstrom et al is equipped with a relief 21, which will provide the tip with a sharper positive cutting edge. It is considered to have been obvious to have provided Mackey '673 with a relief as taught by Sundstrom et al in order to improve the cutting action on the tip of the bit.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mackey '673 in view of Remke et al. The side of Mackey does not have serrations. Figures 3 and 4 of Remke et al show a wood bit having serrations 78. As explained at page 3, column 1, paragraph 3, these ridges minimize the surface area of the outside area of the bit, therefore minimizing friction and heat generated during drilling. In view of this teaching of Remke et al, it is considered to have been obvious to have provided Mackey '673 with serrations on the outer edge in order to minimize friction and heat generated during drilling.

7. Claims 3, 4, 6, 8, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 703-308-1728. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, Andrea Wellington, may be reached at 703-308-2159.

Any inquiries concerning other than the content of this and previous communications, such as missing references or filed papers not acknowledged, should be directed to the Customer Service Center for Tech Center 3700 at 703-306-5648.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number 703-872-9302. Official faxes for After Final amendments should be sent to 703-872-9303. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3722 at the top of your cover sheet.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-1148.



Daniel W. Howell  
Primary Examiner  
Art Unit 3722